CLAIMS

We claim:

1. A universal auction system having a programmable auction server, the programmable

   auction server comprising:

   a plurality of auction modules wherein at least one auction module corresponds to at least

   one function of an auction selected from the group consisting of a bid verifier, an

   information manager, a clearer, a registration manager, and a proxy bidder.

2. The programmable auction server as in claim 1, further comprising:

   auction modules wherein at least one auction specification module performs at least one

   transaction selected from the group comprising a bid verification transaction, an information

   management transaction, a clearing transaction, and a registration transaction.

3. The programmable auction server as in claim 1, further comprising:

   a set of trading primitives;

   a script interpreter for interpreting a temporal protocol script representing an auction

   specification, the script including references to at least a portion of the set of

   trading primitives; and

   means for switching an auction specification of one phase with an auction specification of

   another phase.

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4.   The programmable auction server as in claim 3, wherein at least one auction module of one

2   phase is replaced with at least one auction module of another phase.

5.   The programmable auction server as in claim 1, at least one phase comprising an interval

2   in which at least one transaction occurs, the transaction is selected from the group comprising

3   submitting a bid, admitting a bid, withdrawing a bid, and replacing a bid.

6.   The programmable auction server as in claim 5, wherein the phase is terminated by a

2   condition.

7.   The programmable auction server as in claim 6, wherein the condition is a time period.

8.   A universal auction system comprising:

       a trading primitive;

       a script generator for translating trading primitives to temporal protocol script;

4   a script interpreter for interpreting script protocol; and

5   a market specification console adapted to support a plurality of market

6   protocols.

9.   The universal auction system as in claim 8, the market specification console further

2   comprising a plurality of rules wherein at least one rule is user-modifiable.

10.   The universal auction system as in claim 9, wherein rules comprise market protocols.

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1   11.   The universal auction system as in claim 8, wherein the market specification console is

2   coupled to a programmable auction server wherein said programmable auction server is adapted

3   to receive market protocols from said market specification console, the market specification

4   console having a graphic user interface (GUI).

1   12.   The universal auction system of claim 11, wherein a trader interface is coupled to a

2   network.

1   13.   The universal auction system of claim 12, wherein the trader interface is used by a trader

2   to submit a bid.

1   14.   A market specification console comprising:

2   means for specifying a plurality of market protocols;

3   means for displaying at least one market protocol; and

4   means for transmitting at least one market protocol to a programmable auction server.

1   15.   A method of designing a universal auction system comprising:

2   generating a plurality of auction modules wherein at least one auction module corresponds

3   to at least one function of an auction selected from the group comprising of a bid verifier, an

4   information manager, a clearer, and a registration manager;

5   specifying a plurality of rules wherein a transaction comprises at least one rule; and

6   implementing at least one transaction comprising a bid verification, information

7   dissemination, clearing, and registration of information.

    16.   The method of claim 15 further comprising:

2   displaying a rule to a market designer.

1   17.   The method of claim 15 further comprising:

2   modifying at least one rule.

1   18.   The method of claim 15 further comprising:

2   interpreting a scripted rule.

1   19.   The method of claim 15 further comprising:

2   generating a scripted rule.

1   20.   The method of claim 15 further comprising:

2   transmitting a rule to a programmable auction server.

1   21.   The method of claim 15 further comprising:

2   maintaining a status of bids.